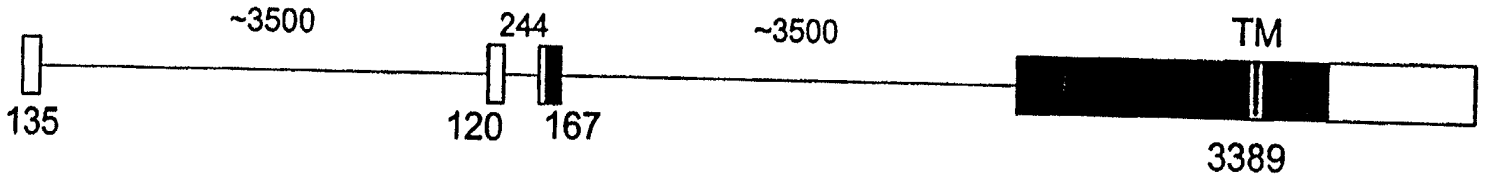
TO2021 39001001



Intron	Position	5' to 3' sequence at EXON/intron boundary
1	135-136	GCGTGGAGgtatgtggctggagtcagct____attttgttttgttttaaagACTTGGCC
2	255-256	TCACGGAGgttagaatgctgagcacgta____gtcatgtgtaatcattgcagGTGGTTCC
3	422-423	TTATCCAGgtaatgaatccacttttaca____atgtcttttattcctgtagGTGTGAAA

FIG. 1

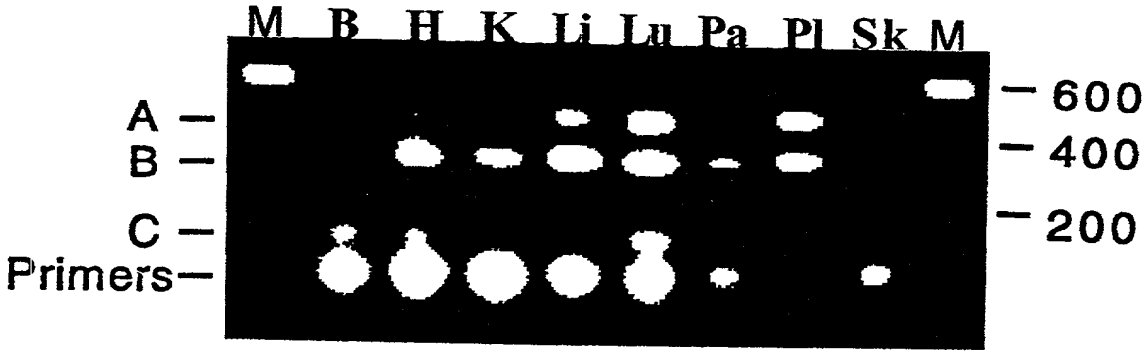


FIG. 2A

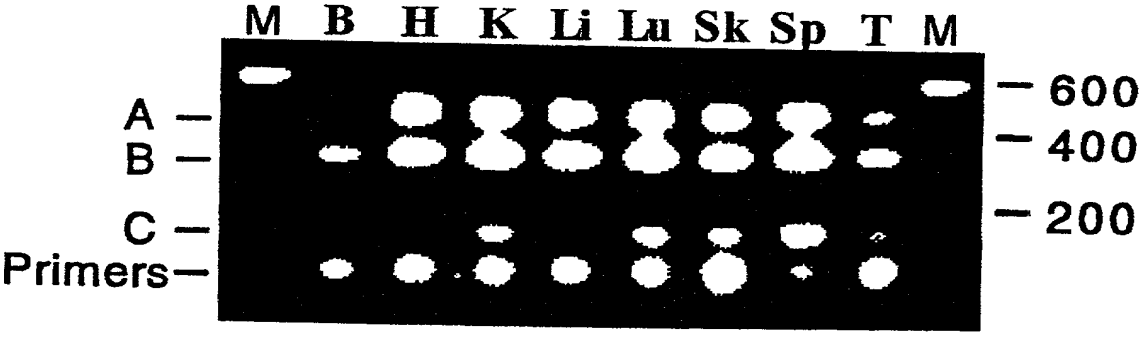


FIG. 2B

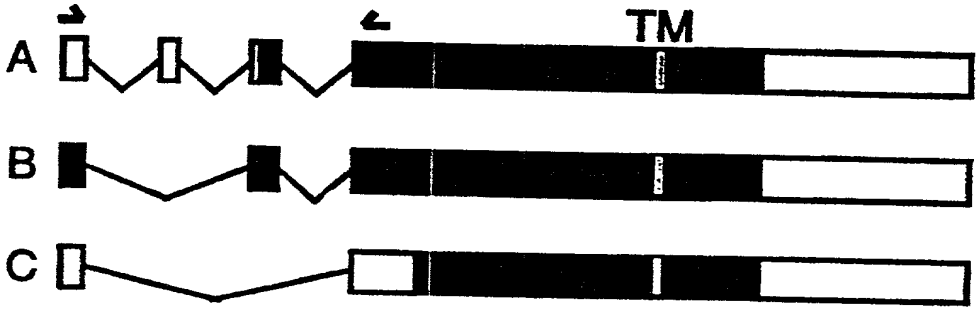


FIG. 2C

FD/2021-9500P005

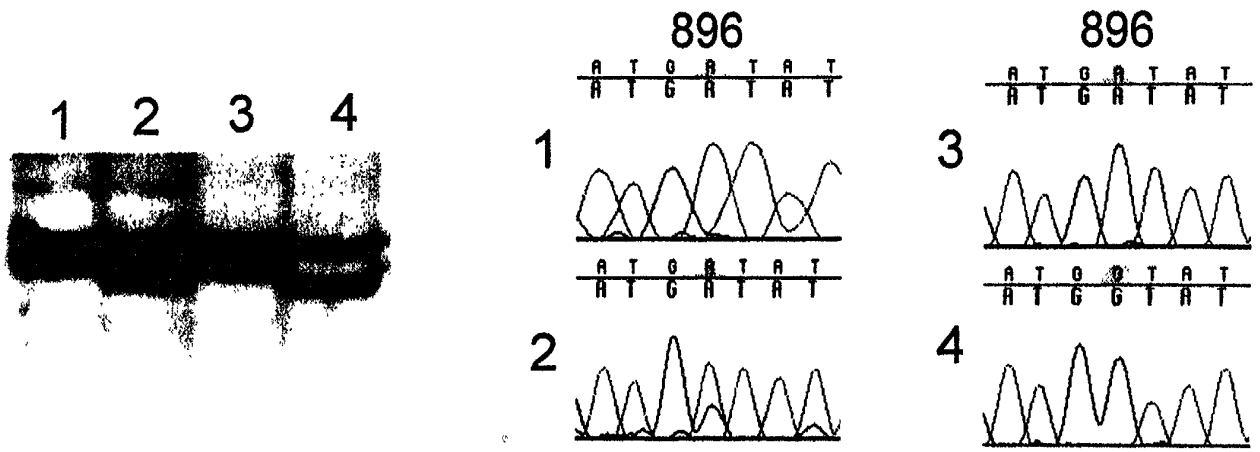


FIG. 3A

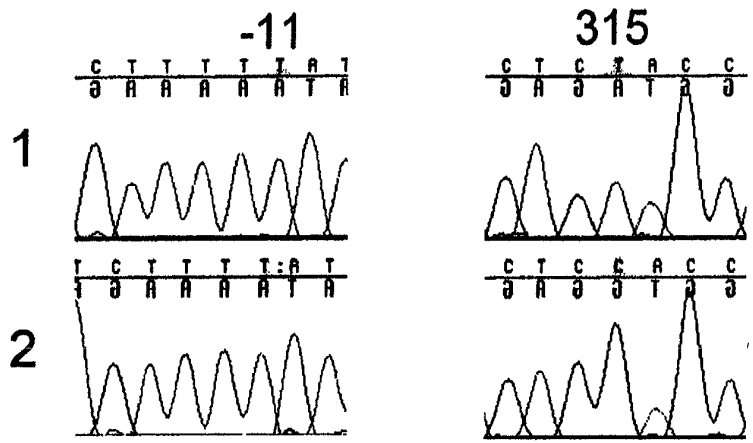


FIG. 3B

PCT/US2004/004004

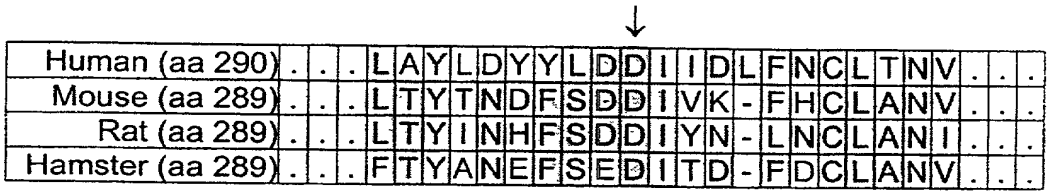


FIG. 4

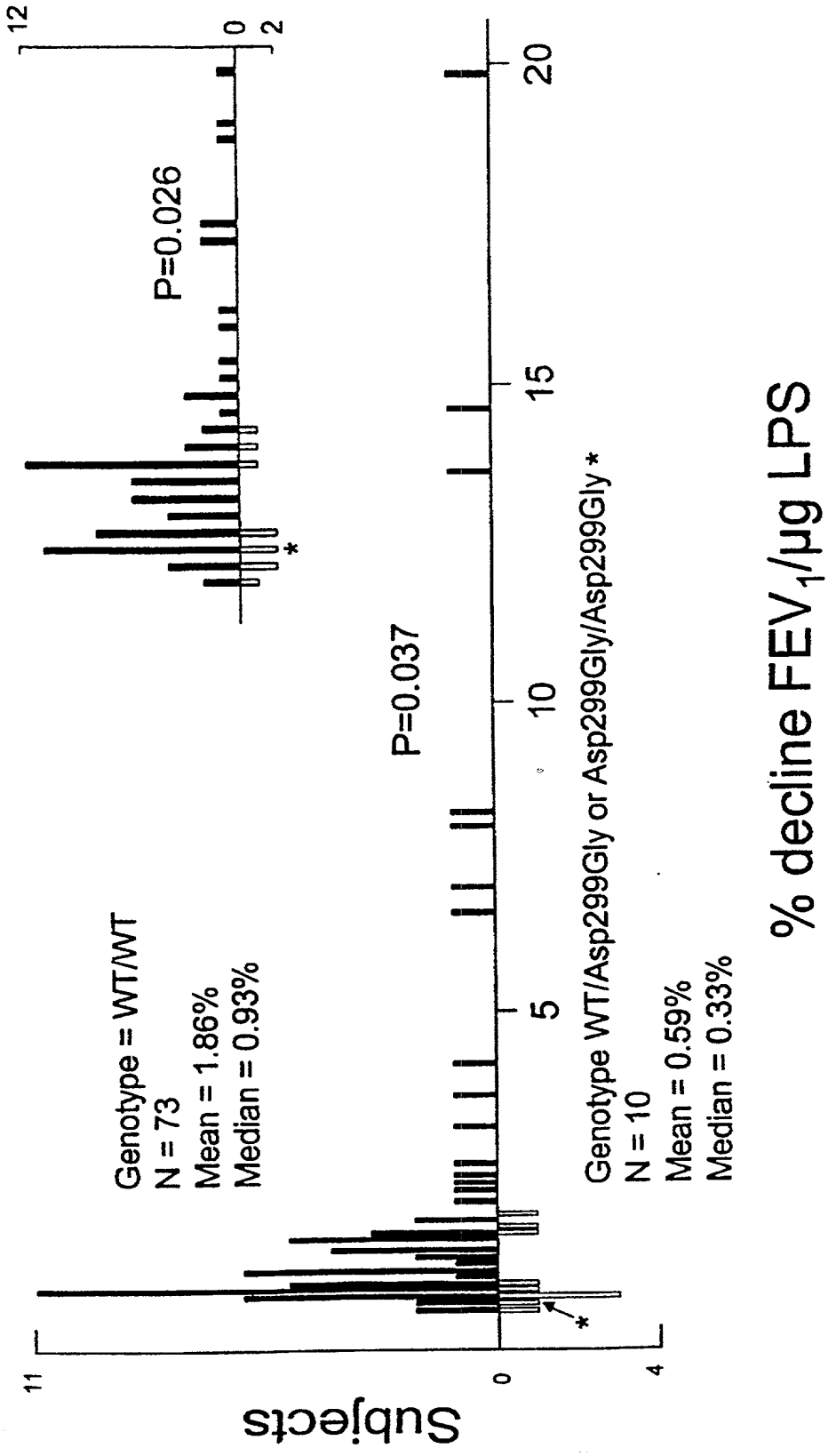

Subjects
% decline FEV1/µg LPS
Genotype = WT/WT
N = 73
Mean = 1.86%
Median = 0.93%
Genotype WT/Asp299Gly or Asp299Gly/Asp299Gly *
N = 10
Mean = 0.59%
Median = 0.33%
P=0.037
P=0.026
11
0
4
12
0
2
5
10
15
20
*
*

FIG. 5

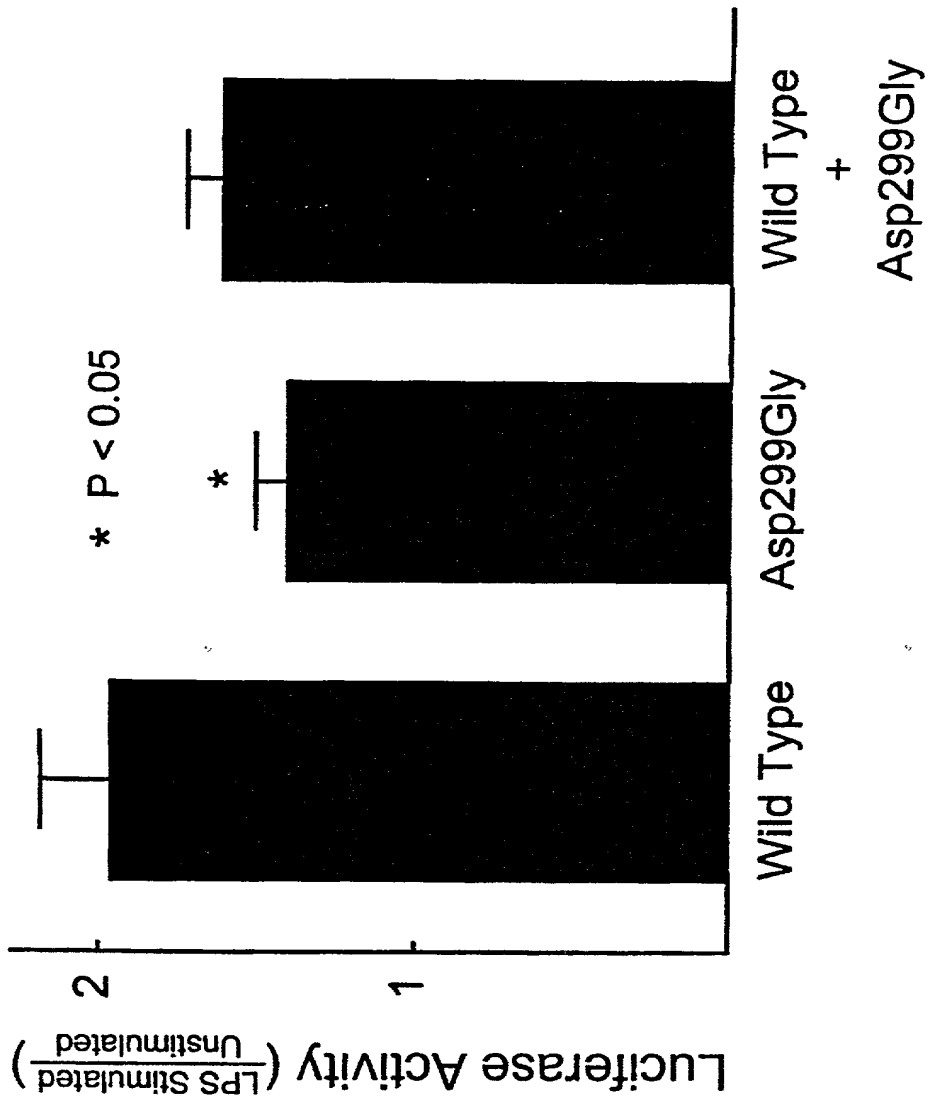

Luciferase Activity (LPS Stimulated / Unstimulated)
2
1
* P < 0.05
*
Wild Type
Asp299Gly
Wild Type + Asp299Gly

FIG. 6A

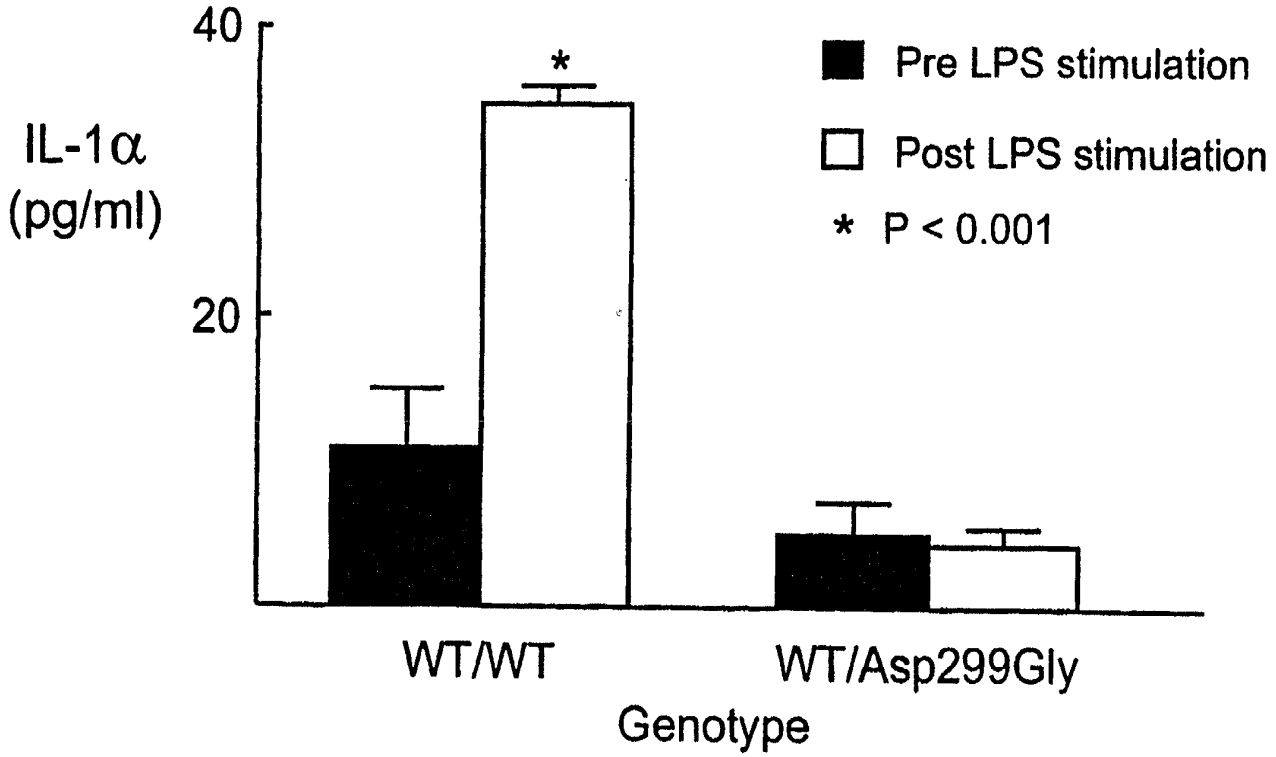

40
20
IL-1α
(pg/ml)
*
Pre LPS stimulation
Post LPS stimulation
* P < 0.001
WT/WT
WT/Asp299Gly
Genotype

FIG. 6B

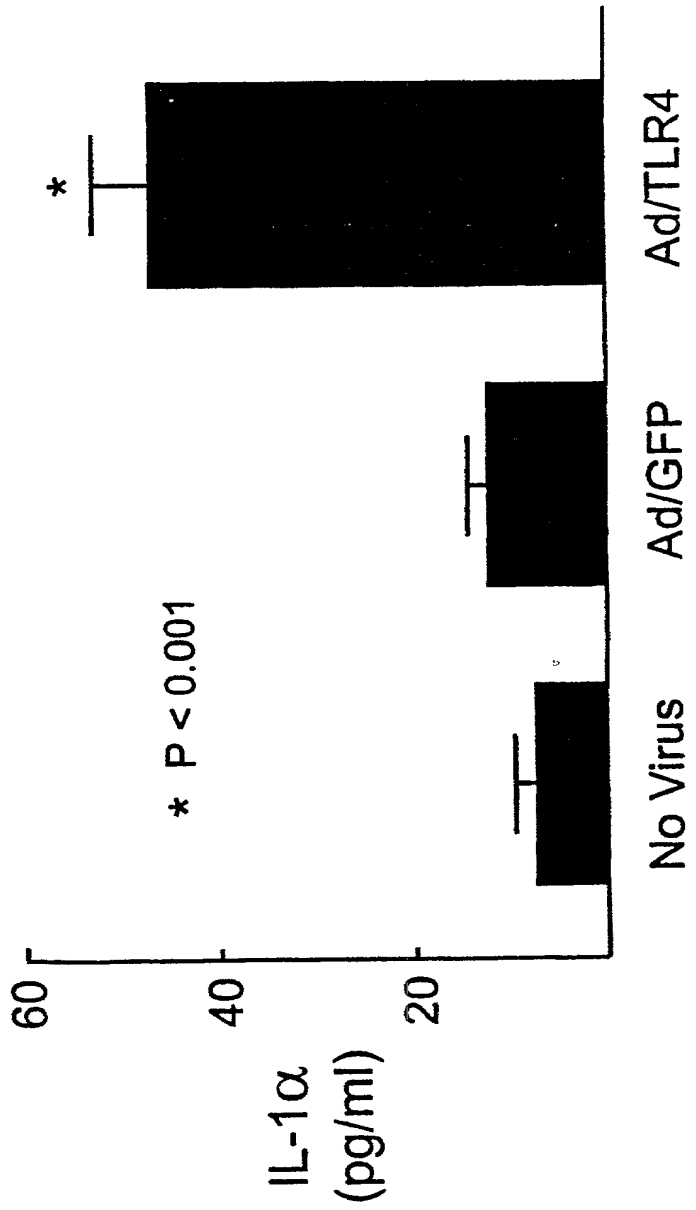


FIG. 6C

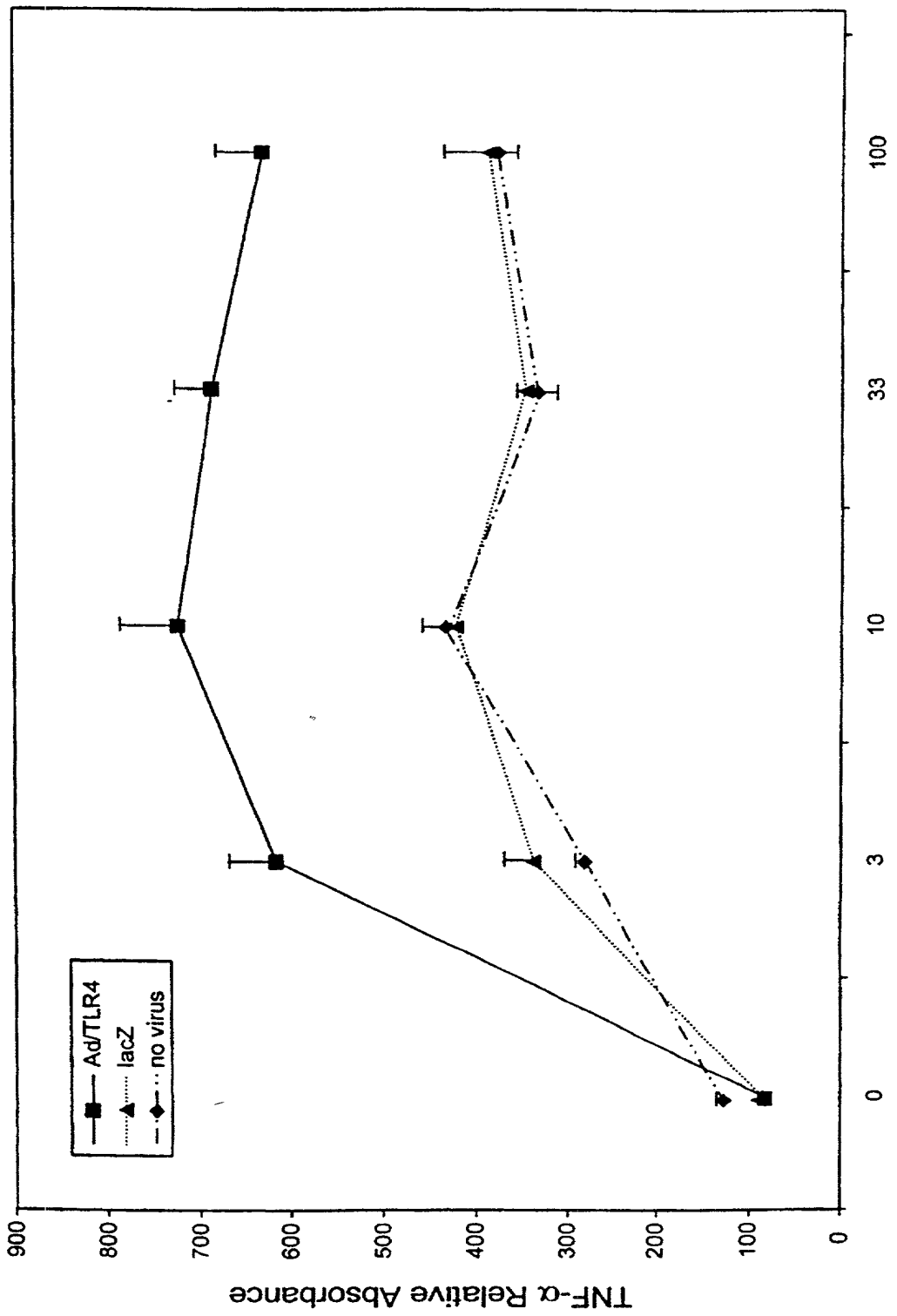

TNF-α Relative Absorbance
900
800
700
600
500
400
300
200
100
0
Ad/TLR4
lacZ
no virus
0
3
10
33
100
LPS concentration ng/ml

FIG. 6D

Amino Acid	Codon
Phe	UUU, UUC
Ser	UCU, UCC, UCA, UCG, AGU, AGC
Tyr	UAU, UAC
Cys	UGU, UGC
Leu	UUA, UUG, CUU, CUC, CUA, CUG
Trp	UGG
Pro	CCU, CCC, CCA, CCG
His	CAU, CAC
Arg	CGU, CGC, CGA, CGG, AGA, AGG
Gln	CAA, CAG
Ile	AUU, AUC, AUA
Thr	ACU, ACC, ACA, ACG
Asn	AAU, AAC
Lys	AAA, AAG
Met	AUG
Val	GUU, GUC, GUA, GUG
Ala	GCU, GCC, GCA, GCG
Asp	GAU, GAC
Gly	GGU, GGC, GGA, GGG
Glu	GAA, GAG

FIG. 7

Original Residue	Exemplary Substitutions	Preferred Substitutions
Ala (A)	val; leu; ile	val
Arg (R)	lys; gln; asn	lys
Asn (N)	gln; his; lys; arg	gln
Asp (D)	glu	glu
Cys (C)	ser	ser
Gln (Q)	asn	asn
Glu (E)	asp	asp
Gly (G)	pro	pro
His (H)	asn; gln; lys; arg	arg
Ile (I)	leu; val; met; ala; phe norleucine	leu
Leu (L)	norleucine; ile; val; met; ala; phe	ile
Lys (K)	arg; gln; asn	arg
Met (M)	leu; phe; ile	leu
Phe (F)	leu; val; ile; ala	leu
Pro (P)	gly	gly
Ser (S)	thr	thr
Thr (T)	ser	ser
Trp (W)	tyr	tyr
Tyr (Y)	trp; phe; thr; ser	phe
Val (V)	ile; leu; met; phe; ala; norleucine	leu

FIG. 8

HUMAN TLR4 GENOMIC SEQUENCE

AAAATACTCC CTTGCCTCAA AAACTGCTCG GTCAAACGGT
GATAGCAAAC CACGCATTCA CAGGGCCACT GCTGCTCACA
AAACCAGTGA GGATGATGCC AGGATGATGT CTGCCTCGCG
CCTGGCTGGG ACTCTGATCC CAGCCATGGC CTTCCTCTCC
TGCGTGAGAC CAGAAAGCTG GGAGCCCTGC GTGGAGGTAT
GTGGCTGGAG TCAGCTCCTC TGAACTTTCC CTCACTTCTG
CCCAGAACTT CTCACTGTGT GCCCTGGTTT GTTTATTTTT
GCAAAAAAAA AAAGAGTTAA ATTACCTTAA AGACTCAAGA
AGCCACAGAG ATCAAATAAT TCATTGTTAC AGGGCACTAG
AGGCAGCCAT TGGGGGTTTG TTCCATTTGG AAATTTTGAG
TGCTAACAGG GGCATGAGAT AACATAGATC TGCTTAAGGT
CCCTGCTCTG CTACCTTGTG GCTCTGTGAA GAAATTATCA
AACCTGTCTG AGACTAGTTT TCGCATCTGT AAGAGAATTA
TAATACCTTC TTCACTAGAG AGTAAGCAGA CTGCTTCAGT
GTCATTTCTT CCCACTGGTG GTCTTTACAC TCAGCTTCAA
GCAGTCACCC TGCTCCTTTC AATCTCAGGA AAAAGATGGC
TTTGTGTGTG TGTCTCT:A: G:AGAAAGAA CTTTCTAAGT
TGGTGCAGA CTTCTGTATG CAGTAATATA GTTTAGTCCA
GAGGATGAAA AAAATAAGAG A:ATGAAAAA GGAAAAGAGA
GAGAGAGA:G AAGAAAAAAG CAAGAGGGAA AT:ATGTATA
ATGTCAGCTA ATGCAAC:AG TTTCTTTCTT AGTGAAATAC
CAATCAGCTG :GTTG:GTAA TCTT:ATTCA TGATGGATCT
CTTTTGTTTT TCCCCTGCGC AGACTTC:AC AGTTGCTTTA
GAAACCCATA GTAGAGCCGA A:CAGCTAAG AAAATGATTT
ACAGTGAGGC AGGGTCAGAA ACTCAAGAGA GAAAAAGCCA
GCTGCAGTC: CTGAAGT:TG AGGATATAGG :AGAAAATCA
AGTAATATTT AGCAAAGACT AATTCATTAT CTTGAAGCCA
TCCCTTCCCT CAATTCCCTG CCCATAGTCC TCCTCCTTGT
CCTCTTCTCT GNA:TCCCTC TGCTGTTAGG TTA:ATGG:A
GATAGATTTT CTAATTANGC TCACTGCGAG ATAAAACCCA
GCCCATGTTT CTATTAGNCA ATATTGTCTT TGAGGCTCCA
TGGCTTGCAN CATTTAAGCA GACATACGAA TGAAGATCTG
CATGTTTGAA CTCTGACTTT GCGCATATTA CTTCATTTCT
TTGAATTTCC ATTTTCCTCA TCTTTAAATG CTTATTTGAA
GATTAAGTGA AAGTATATAA CAAACAAGAA CTATGCAGGC
GTATGGTAAG GGATTAATGA TAGATGATAA TAATTAATGT
TGACATCTAT TGATCACTTA TACTGTAGCG GGCTTTTAAA
TAAACTCTTT AAACACCTTA TCTCATTTAA TCCTTCAAAC
ATTCTATTGG TTTCAAACAA CAGAAAACTA CAATTAGCTG
GCTTCTGCAA GGAATTTTGT TGGAGGAAAT GAGAGCATTC
AGAAATTAGA TGGGAGCGTT AGAGAATTAG GCTTACAAAG
AATGTGGGAA AGTAGGCTAG AAAGCAGTGT AAAAACAAAG
ACAGCATAAA GCACTTGACC TTATTTACTA GGTTCCACCA
TGGGAATCCA TGCACTCTAA AGATTTCCCC CTATTTCTAC
ATCACTTTGC TCAAGGGTCA ATGAGCCAAG GAAAAGAATG

FIG. 9

CAGTTGTCAA AATCTGGGCC ATGACTAAGG AAGGTCTGGA
CATCTTGACT GCCAGACAGT CTCCCCAATG ATATGGAGTA
TTTAGAATGA TACTGGATAT TTTATTTATT TTTTGTATTT
TCAACTTTTA AGTTCAGAGG CACATGTGCA GAGCATGCAG
GTTTATTACA TAAGTAAATG TGTGCCATGG TGATTTGCTG
CATAGATCAT GAAAATATGG AACGCATCAT GGATTTGTGT
GTCATCCTTG TGCAGGGGCC ATGCTCATCT TCTCTGTATC
CTTCCAATTT TAGTATATGT GCTACTGCAG CAAGCACGAT
ATTGGATATT TTATTACCTA CATTTTACAT ATGATAAAAT
GAGGCTCACT GAGGTTTTTC TTTTGTTCGT TTTATTTTGT
TTTGTTTTTA AAGACTTGGC CCTAAACCAC ACAGAAGAGC
TGGCATGAAA CCCAGAGCTT TCAGACTCCG GAGCCTCAGC
CCTTCACCCC GATTCCATTG CTTCTTGCTA AATGCTGCCG
TTTTATCNCG GAGGTTAGAA TGCTGAGCAC GTAGTAGGTG
CTCTTTACTT TCTAATCTAG AGTAAGACAA TTTATAAGCA
TGAATTGAGT GAATGGATGG ATGGATATAT GGATGGAAGG
ATGGACAGAT GGATGAAAGG TTGACTGAAT TTTGTGCTTG
CACAAAAAGA GGCCCCTCTC CACCATCTCT GGTCTAGGAG
AGGGGAGTTG GGAGACCATG CAGTAAAGAT ACTTCATGTC
ATGTGTAATC ATTGCAGGTG GTTCCTAATA TTACTTATCA
ATGCATGGAG CTGAATTTCT ACAAAATCCC CGACAACCTC
CCCTTCTCAA CCAAGAACCT GGACCTGAGC TTTAATCCCC
TGAGGCATTT AGGCAGCTAT AGCTTCTTCA GTTTCCCAGA
ACTGCAGGTG CTGGATTTAT CCAGGTAATG AATCCACTTT
TACATACTGC ACAAGGTGAG GTGTTCATTG TCCTATCATT
TCATTATTGG ACTGGAAAGC TTGGTTTGTG GAGTCTCATC
TTCATTCACT TATTCATTCA TACAACAGAT GTCTTATTAA
CTATATAACC TTGAGCAAGC TACCTCTATT CTCCAGGTCT
CAGTTTTCTA ATCTGTGAAG TAGGCAGTTG GCTGAGACAG
CTTCTAAGGG CAATTCTAAT TTTAGGTTTT CTTTTAAGAC
AGGAGAGAAA ATTAGCTTAA ATTCTTTCAT AAGCAGCTAT
TTATTGACTA CTTGCTATAT GTTGTACACT CTGCAAGAAG
ACAGGCATAT ATTGATATAT AACACACAGC CCCTGTTGTT
AAGGAGGCAT ATCTTCTTGA AAGAGTTAAT ACCTTAAAGT
CCTGGGTATG GTCCTGGGTA CATAGTATAT AGTCAACACA
TTTTAATTAT GATTTTTTGG ATCTGGAAAC TGATATAAAG
ATAGCGACAT ATAACAGTAG GTGATAAATT ATGTTTAAAC
TAAAGGTAAC TAATTGTATT TTTCAGAAGA GGGGCCTTCT
CTGTGGTGGG TAGTCAAGAA AGATTCATGA ACTGCATAAG
ATTCAAACAA TGTCTAGAAT ATTAAAACTA GTGGTGGCAG
GTGAAATGTC ATCTTGATAT TTTAGGGGAA CCAAATTCTA
AAAGGGTTTT CATCATCGGG GCCTTATTTG CAAATCGAAC
TAGATAATGG ATCATGTTCT CTGCAATGGT TTGTAAAACA
TTTCAAAACA TTTTACATAT TTTTTATTAT AGAAATTATT
GATAAAGACT AAGGTCACAG TATAAAAATC CTTTTTAGAG
CAGACATTTC TGTAGAAGAG TGAACATATG ACCTATTATA
CTCTAATTTG GATATAGATA GGATGTAACA AAGGAGTAAT

FIG. 9 (Continued)

GGGAACAATT CAAAGGCAGT GGTATAGTGC ATANAGTCCT
GTTGGGGTCA GAAGACCTGA GCCCAAGTTT ACCCCCAACA
TTTATAACCC ATGTAACCTT AGCATATTAC TTCATCTCCC
TTAATCCTTA GTTTCATATC TGATCAATGG AAATGATGAA
ACTTATTCTG CTGGATTAAA TGTGATAATA AATATTAATA
TGCTGTATAT ATTTAAATTT TTATAAAATA TATTTTATAA
GCATAAAGTA TTCTTACAGA ATTTCATTAG GTTTTTAAAA
TAATTTCAAC TTTTATTTTT GATTCAGGGA TTTACATGGT
TATATTGCGT AATGCTGAGG TGTAGGGTAC AATCGATACC
ATCACTCAGG TAGTGAGCAT AGTACCCAAT AGTTAGTTTT
TCAACCCTTG CTGCTTTCTC TCTATCCCCT CTCTAGTAAT
CCCCAGGGTC TATTTTTGTC ATCTTTATGT CCATGTGTAC
TCCATGTTTG GATCCTACTT ATAAAGTGAG AACTCATGGT
ATTTGGCTTT CTGTNCCTTT GTTNGCTAAT TTGCTTAGGA
TAATGGCTAC TAGCTGCATC TATGCCATTA TGTTCTAAAT
TTCANTTNCC TGCATGAAAA TTTTGTCAAG TACTCTATTA
AGGTAGACCA CCTCTCCCTT TTTTTTTCAA ACAAGAAGTA
GNTTTTCCCA AACAATGCCC TTATGGAATT NATCTTCAAT
CCNNGGATAC CCAATAACTT GCCCCAAANC CTTAATCTGN
CTTACAGAGA GGCCACCTTC CTTCTGTAAC CCATAGGAGA
TTTGGATTGG TAAGAATGCT TTGTGATAGC CCAGCAGCCT
TCTTTCCCCT ATAGAAATAT ATATATANTC TTTTTATAGG
TGAGGAACTG AAGCTTGAAT AATTTAAATG ACTTATATAC
ATNATCATTG CTTGTTAGCC ACAGACCAGA GATTTAAGTT
CNCATCTCCA GAATCCAACT TAAATGTTTT CTTTGTCTTA
ATACTCTACT TCTCTAAAGT GATTATCACC AATGTAATGA
TATAGAGNCA CAGCAAGACC CTTTCCTTCT CACCTAATGT
ATAGAGCAAT GCAGAGATAG AATGATGGGC TATAACAATC
ATATAATTGA AAGAAAGAAC TTCAAAAATA ATCAAGTTCA
GCTGTTTGAT TTATAAATGT GATAACTAAA ACCTAGAGAG
GAAAAGAGGT ACTCAAGATC ACACAGTAGG AGAGGACTGC
AGAAACACCA AACCCAAGCT CTTTTGTCCA CTCTTCCAGC
GTTCTTTCTA CTATACTGCC TATCCTTTAT CTAGTTACCA
ATAAATAACA AAAGCTTGGA CCACAATGCT TTTATTGTCT
AGGAAACTCC TGAAGAAGCT AAATAAAATG GGTGGGGAAT
ATTGTAAATG TAATTCAGGC TGGATTAAGA AAGAACTTAT
TTGACATTGT AACTGACAAG CACCTGCAAT GCTGAAAGGA
ATTTTTCATT GGCNTGCTGT TTGCTGGGCT GCATCAAAGC
CCTGTCTCTA GGACATGTCT CTGAACATTG TGTGTAGCAT
GGCTTTCATT TCTTTTAGGA TAAAATTCAA AACCCTTTAT
CTGGTTGGTA AACCTCTGCC TAATTGGGAA CCTTCTTTCT
CCACAACTCC ATATTGTACA CTCCAATTTC ATCTCTGTTC
TCCAACCATG GAAGCTATTT GTCATGATTC CTCCTTGTGT
CATTTTTTTT CTGTCAACCT TGGGGCTTTT GTGTTTGCTG
TTCACTTCAC CTCCTTTTAT TGTTAACTTC TACTCATCTT
TCAATTTTCA ACTTAAGTGT TCTCAGAGAA ACCTACTTTG
ATTTTCTTGG TCCANAACGG TTCTCTGGAT GTGAACTCTT

FIG. 9 (Continued)

ATAGCACATA ATTTTCACTT TTTTCCACAA AACTCGCTCC
TATCACCTGT TACAAGCATT TACCTCTGAT AACAAGAACT
TTCAAATATC TAGCTGTCAT GTAAGCACTT TTCATAAACA
TTAAGAGTAT CTGTGACACT TATGTGTAAT GTTTCGTATC
TCTGAAATTG ATATTTACCA GTCATTTATC TTGGCTACCA
ACTAACAACT ATCCATATTA TCTGTACCAA TCAGATGTAT
AATCACAATT TTGTGTGACA GAAAATGGCT AAACTTGATC
CAAGGCTATT ACATGCTTT: ATCAACTGCA CAATCTTTAT
ATATGTCAAT TATTGATCTT TAACTGATTT CCTTCTTATG
:GATTTTCTC CTCTGCTTAT CATGTATGCC TAACAT:GAC
AAAAAAG:AG CCTA:TCATT GCAGCCAGTA TGATAATACT
CA:GTCTGTG GGGCTTCTTA TTTGCTTAT: TCCATCATCA
TCTGTCCTGC TTGATGTCTT TGCCTATGCA CAATCATATG
:ACCCATCAC ATCTGTATGA AGAGC:TGGA TGACTAGGAT
TAATATTCT: AT:::TTTAG GTTCTTATT: CAGCAGAAAT
ATTAGATAA: TCAATGTCTT TTTATTCCTG TAGGTGTGAA
ATCCAGACAA TTGAAGATGG GGCATATCAG AGCCT:AAGC
CACCTCTCTA CCTTAATATT GACAGGAAAC CCCATCCAGA
GTTTAGCCCT GGGAGCCTTT TCTGGACTAT CAAGTTTACA
GAAGCTGGTG GCTGTGGAGA CAAATCTAGC ATCTCTAGAG
AACTTCCCCA TTGGACATCT CAAAACTTTG AAAGAACTTA
ATGTGGCTCA CAATCTTATC CAATCTTTCA AATTACCTGA
GTATTTTTCT AATCTGACCA ATCTAGAGCA CTTGGACCTT
TCCAGCAACA AGATTCAAAG TATTTATTGC ACAGACTTGC
GGGTTCTACA TCAAATGCCC CTACTCAATC TCTCTTTAGA
CCTGTCCCTG AACCCTATGA ACTTTATCCA ACCAGGTGCA
TTTAAAGAAA TTAGGCTTCA TAAGCTGACT TTAAGAAATA
ATTTTGATAG TTTAAATGTA ATGAAAACTT GTATTCAAGG
TCTGGCTGGT TTAGAAGTCC ATCGTTTGGT TCTGGGAGAA
TTTAGAAATG AAGGAAACTT GGAAAAGTTT GACAAATCTG
CTCTAGAGGG CCTGTGCAAT TTGACCATTG AAGAATTCCC
GATTAGCATA CTTAGACTAC TACCTCGATG ATATTATTGA
CTTATTTAAT TGGTTGACAA ATGGTTCTTC ATTTTCCCTG
GTGAGTGTGA CTATTGAAAG GGTAAAAGAC TTTTCTTATA
ATTTCGGATG GCAACATTTA GAATTAGTTA ACTGTAAATT
TGGACAGTTT CCCACATTGA AACTCAAATC TCTCAAAAGG
CTTACTTTCA CTTCCAACAA AGGTGGGAAT GCTTTTTCAG
AAGTTGATCT ACCAAGCCTT GAGTTTCTAG ATCTCAGTAG
AAATGGCTTG AGTTTCAAAG GTTGCTGTTC TCAAAGTGAT
TTTGGGACAA CCA:GCCT:A AAGTATTTAG ATCTGAGCTT
CAATGGTGTT A:TTACCATG AGTTCAAACT TCTTGGGCTT
AGAACA:ACT AGAACATCTG GATTTCCAGC ATTCCAATTT
GAAACA:AAT GAGTGAGTTT TCAGTATTCC TA:TCACTCA
GAAA:CCT:C ATTTACCTTG ACATTTCTCA TACTCACACC
AGAGTTGCTT TCAATGGCAT CTTCAATGGC TTGTCCAGTC
TCGAAGTCTT GAAAATGGCT GGCAATTCTT TCCAGGAAAA
CTTCCTTCCA GATATCTTCA CAGAGCTGAG AAACTTGACC

FIG. 9 (Continued)

TTCCTGGACC TCTCTCAGTG TCAACTGGAG CAGTTGTCTC
CAACAGCATT TAACTCACTC TCCAGTCTTC AGGTACTAAA
TATGAGCCAC AACAACTTCT TTTCATTGGA TACGTTTCCT
TATAAGTGTC TGAACTCCCT CCAGGTTCTT GATTACAGTC
TCAATCACAT AATGACTTCC AAAAAACAGG AACTACAGCA
TTTTCCAAGT AGTCTAGCTT TCTTAAATCT TACTCAGAAT
GACTTTGCTT GTACTTGTGA ACACCAGAGT TTCCTGCAAT
GGATCAAGGA CCAGAGGCAG CTCTTGGTGG AAGTTGAACG
AATGGAATGT GCAACACCTT CAGATAAGCA GGGCATGCCT
GTGCTGAGTT TGAATATCAC CTGTCAGATG AATAAGACCA
TCATTGGTGT GTCGGTCCTC AGTGTGCTTG TAGTATCTGT
TGTAGCAGTT CTGGTCTATA AGTTCTATTT TCACCTGATG
CTTCTTGCTG GCTGCATAAA GTATGGTAGA GGTGAAAACA
TCTATGATGC CTTTGTTATC TACTCAAGCC AGGATGAGGA
CTGGGTAAGG AATGAGCTAG TAAAGAATTT AGAAGAAGGG
GTGCCTCCAT TTCAGCTCTG CCTTCACTAC AGAGACTTTA
TTCCCGGTGT GGCCATTGCT GCCAACATCA TCCATGAAGG
TTTCCATAAA AGCCGAAAGG TGATTGTTGT GGTGTCCCAG
CACTTCATCC AGAGCCGCTG GTGTATCTTT GAATATGAGA
TTGCTCAGAC CTGGCAGTTT CTGAGCAGTC GTGCTGGTAT
CATCTTCATT GTCCTGCAGA AGGTGGAGAA GACCCTGCTC
AGGCAGCAGG TGGAGCTGTA CCGCCTTCTC AGCAGGAACA
CTTACCTGGA GTGGGAGGAC AGTGTCCTGG GGCGGCACAT
CTTCTGGAGA CGACTCAGAA AAGCCCTGCT GGATGGTAAA
TCATGGAATC CAGAAGGAAC AGTGGGTACA GGATGCAATT
GGCAGGAAGC AACATCTATC TGAAGAGGAA AAATAAAAAC
CTCCTGAGGC ATTTCTTGCC CAGCTGGGTC CAACACTTGT
TCAGTTAATA AGTATTAAAT GCTGCCACAT GTCAGGCCTT
ATGCTAAGGG TGAGTAATTC CATGGTGCAC TAGATATGCA
GGGCTGCTAA TCTCAAGGAG CTTCCAGTGC AGAGGGAATA
AATGCTAGAC TAAAATACAG AGTCTTCCAG GTGGGCATTT
CAACCAACTC AGTCAAGGAA CCCATGACAA AGAAAGTCAT
TTCAACTCTT ACCTCATCAA GTTGAATAAA GACAGAGAAA
ACAGAAAGAG ACATTGTTCT TTTCCTGAGT CTTTTGAATG
GAAATTGTAT TATGTTATAG CCATCATAAA ACCATTTTGG
TAGTTTTGAC TGAACTGGGT GTTCACTTTT TCCTTTTTGA
TTGAATACAA TTTAAATTCT ACTTGATGAC TGCAGTCGTC
AAGGGGCTCC TGATGCAAGA TGCCCCTTCC ATTTTAAGTC
TGTCTCCTTA CAGAGGTTAA AGTCTAGTGG CTAATTCCTA
AGGAAACCTG ATTAACACAT GCTCACAACC ATCCTGGTCA
TTCTCGAGCA TGTTCTATTT TTTAACTAAT CACCCCTGAT
ATATTTTTAT TTTTATATAT CCAGTTTTCA TTTTTTTACG
TCTTGCCTAT AAGCTAATAT CATAAATAAG GTTGTTTAAG
ACGTGCTTCA AATATCCATA TTAACCACTA TTTTTCAAGG
AAGTATGGAA AAGTACACTC TGTCACTTTG TCACTCGATG
TCATTCCAAA GTTATTGCCT ACTAAGTAAT GACTGTCATG
AAAGCAGCAT TGAAATAATT TGTTTAAAGG GGGCACTCTT

FIG. 9 (Continued)

TTAAACGGGA AGAAAATTTC CGCTTCCTGG TCTTATCATG
GACAATTTGG GCTATAGGCA TGAAGGAAGT GGGATTACCT
CAGGAAGTCA CCTTTTCTTG ATTCCAGAAA CATATGGGCT
GATAAACCCG GGGTGACCTC ATGAAATGAG TTGCAGCAGA
TGTTTATTTT TTTCAGAACA AGTGATGTTT GATGGACCTA
TGAATCTATT TAGGGAGACA CAGATGGCTG GGATCCCTCC
CCTGTACCCT TCTCACTGCC AGGAGAACTA CGTGTGAAGG
TATTCAAGGC AGGGAGTATA CATTGCTGTT TCCTGTTGGG
CAATGCTCCT TGACCACATT TTGGGAAGAG TGGATGTTAT
CATTGAGAAA ACAATGTGTC TGGAATTAAT GGGGTTCTTA
TAAAGAAGGT TCCCAGAAAA GAATGTTCAT TCCAGCTTCT
TCAGGAAACA GGAACATTCA AGGAAAAGGA CAATCAGGAT
GTCATCAGGG AAATGAAAAT AAAAACCACA ATGAGATATC
ACCTTATACC AGGTAGATGG CTACTATAAA AAAATGAAGT
GTCATCAAGG ATATAGAGAA ATTGGAACCC TTCTTCACTG
CTGGAGGGAA TGGAAAATGG TGTAGCCGTT ATGAAAAACA
GTACGGAGGT TTCTCAAAAA TTAAAAATAG AACTGCTATA
TGATCCAGCA ATCTCACTTC TGTATATATA CCCAAAATAA
TTGAAATCAG AATTTCAAGA AAATATTTAC ACTCCCATGT
TCATTGTGGC ACTCTTCACA ATCACTGTTT CCAAAGTTAT
GGAAACAACC CAAATTTCCA TTGGAAAATA AATGGACAAA
GGAAATGTGC ATATAACGTA CAATGGGGAT ATTATTCAGC
CTAAAAAAAG GGGGGATCCT GTTATTTATG ACAACATGAA
TAAACCCGGA GGCCATTATG CTATGTAAAA TGAGCAAGTA
ACAGAAAGAC AAATACTGCC TGATTTCATT TATATGAGGT
TCTAAAATAG TCAAACTCAT AGAAGCAGAG AATAGAACAG
TGGTTCCTAG GGAAAAGGAG GAAGGGAGAA ATGAGGAAAT
AGGGAGTTGT CTAATTGGTA TAAAATTATA GTATGCAAGA
TGAATTAGCT CTAAAGATCA GCTGTATAGC AGAGTTCGTA
TAATGAACAA TACTGTATTA TGCACTTAAC ATTTTGTTAA
GAGGGTACCT CTCATGTTAA GTGTTCTTAC CATATACATA
TACACAAGGA AGCTTTTGGA GGTGATGGAT ATATTTATTA
CCTTGATTGT GGTGATGGTT TGACAGGTAT GTGACTATGT
CTAAACTCAT CAAATTGTAT ACATTAAATA TATGCAGTTT
TATAATATCA AAAAAAAAAA AAAAAAAA

FIG. 9 (Continued)